



Atomic, Nuclear, and High-Energy Physics

In this section, we highlight examples of recent research that is representative of the work done in the ADTSC Directorate in support of the mission of LANL and the DOE. LANL has developed a major capability in this area, and the articles in this section exemplify the breadth of our work.

This section includes discussions on increasing the repetition rate in various nuclear magnetic resonance applications, understanding the source of matter-antimatter asymmetry in the universe, calculating local-thermodynamic-equilibrium light-element opacities, using quantum Monte Carlo simulations to investigate the role of the three-neutron force in neutron matter, applying molecular dynamics to the development of stopping models in plasmas, and creating new and better databases of nuclear masses and decay half-lives.